Improving High-Powered Magnetic Ring-Type Soliton Emitters by Reinforcing Solitons in Three Dimensions for Enhanced Penetrative Capacity; Overcoming Soliton-Dispersive Coatings

13 January 2023 Simon Edwards Research Acceleration Initiative

## Introduction

While passing electromagnetism of the conventional variety through the center of electromagnets of alternating polarity leads to the formation of individual walls of electromagnetism known as soliton waves and the strength of these waves may be varied to increase the range of the waves, the density of energy in two dimensions is not the only factor in determining the likelihood of a wave penetrating deep into the Earth (for mineral surveying) or into the ocean (for submarine detection.) This is not to mention the need for options to overcome soliton-dispersive coatings that may render soltion radars ineffective within the next five years.

## **Abstract**

To better control the tendency of solitons to penetrate a material, they should be reinforced in three dimensions. To be reinforced in this manner, successive waves, ordinarily separated by several inches (if based upon microwave-band energy) would need to be compressed so that the individual walls of energy are brought to within about a millimeter of one another. Where if a given section of the first wave has been modified to have its electrons spinning forward (as from exposure to the south side of a magnet,) the next wave would have its electrons spinning backward (north-influenced) in that area so as to complement the neighboring wave(s.)

The operative question is one of how to slow the foremost wave in a series so that the trailing waves may catch up and that several or perhaps dozens of these two-dimensional energy "pancakes" can be brought into such close proximity that when they eventually pass through solid matter, the complementary magnetic force of the multiple layers acts to further overpower the scattering effects of the material in question beyond the capacity of an individual soliton wave.

Strong magnetic fields can slow the passage or electromagnetic energy. This basic principle is what makes soliton formation possible in the first place. I propose that rather than trying to make individual soliton waves of everincreasing electron density (intensity/power,) it would be more effective for most applications to have several densely-packed layers of moderate energy density. This is true for much the same reason why a bolt fired from a crossbow has more penetrative power than most types of bullets. A great deal of mass focused on a small area and all moving in the same direction has superior penetrating capacity when compared to a bullet, which has less mass, is generally not sharpened, and has much of its energy stored in the form of rotational energy. Crossbow bolts, since they are heavy and have physical stabilizers, do not need to employ spin for aerodynamic stability. In

our case, rather than increasing mass, we're proposing an increase to the magnetic potential of EM in a specific area by fully taking advantage of a three-dimensional space that is ordinarily mostly wasted when dealing in two-dimensional waves.

Crystals, although capable of both slowing EM's apparent movement through space (by influencing route) are not suitable for this application due to their natural tendency to scatter soliton waves, converting them back into standard EM. Only a magnetic field can authentically slow the motion of electrons through three-dimensional space. When dealing with soliton waves, only redundant sets of ring magnets calibrated in a manner identical to the first ring EM is passed through to achieve solitonization can be used without corrupting the wave.

As such, the best approach would be to configure a cylinder consisting of multiple rings that pulse magnetism in sequence, slowing the foremost soliton wave but slowing successive waves to a proportionally lesser extent. This would necessitate that each ring in the sequence be markedly more powerful than the previous and would call for precision timing. The necessary power levels should be attainable via plutonium battery (for orbital platforms) and could be powered using more conventional means here on Earth.

## Conclusion

If a two-dimensional soliton wave can penetrate hundreds of feet of water, a three-dimensional, multi-layered "soliton cake" could well-be capable of enabling the assay of the subterranean Earth down to the very core. Variably calibrated three-dimensional soliton waves would be capable of defeating even hypothetical stealth technologies such as the soliton-scattering coatings proposed by this author last year.